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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/625,953

07/23/2003

Angus J. Tocher

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9904

20212

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02/14/2005

THOMPSON LAMBERT
SUITE 703D, CRYSTAL PARK TWO
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ARLINGTON, VA 22202

EXAMINER

GONZALEZ, JULIO C

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,953

Applicant(s)

TOCHER, ANGUS J.

Examiner

Julio C. Gonzalez

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2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/23/03</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Flow and Suction Driven Wind Energy Generator.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the regions of vacuum must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: in figure 9, element 36. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C.

112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims disclosed that the flow of wind induces “regions of vacuum”.

What is meant by inducing regions of vacuum? Providing air? Sucking air?

Are the regions between the vacuum generators? Or at the intake collectors?

The specifications are not very clear as to where the regions of vacuum are located or in what direction are the vacuum of regions flowing. Away from the energy converter or into the energy converter?

With respect to claims 2, 4, 6, 7 and 8, the claims disclose one or more flow regulator valves to prevent or reduce or to manage limit or otherwise control the flow of air. It is not clear what are the valves really supposed to do. Do the valves only control the flow or do they reduce the reverse flow of air?

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With respect to claims 5, 6, 7 and 13, the claims disclose a venturi design. It is not clear what has such design since vacuum generators, secondary accelerators and other devices aid in such venturi design. Is it the energy converter having such venturi design? Also, it is disclosed that “the two forming a venturi spacing through which said wind flows”. Which two devices form the venturi spacing?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

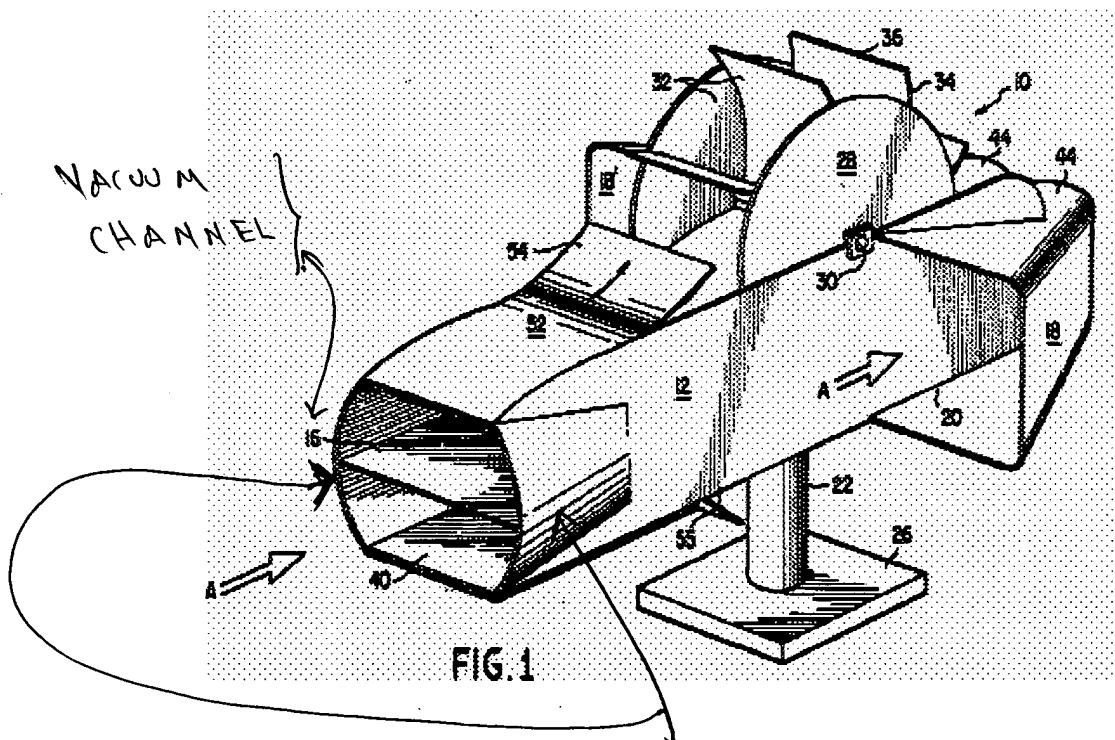
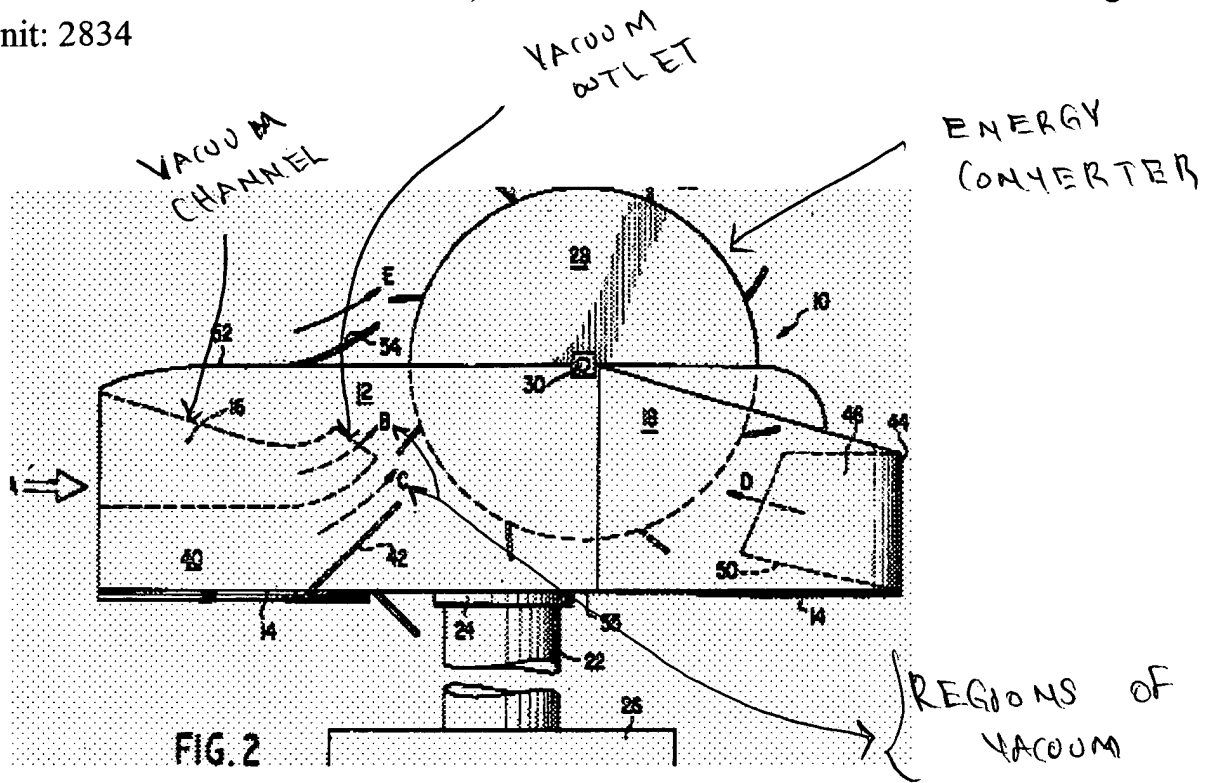
7. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman (US 4,191,505) in view of Lamont (US 5,447,412).

Kaufman discloses wind energy conversion having one or more vacuum generators. The vacuum generators disclose by Kaufman inherently accelerate the flow of wind since such device uses the Venturi principle (column 1, line 64; column 2, lines 8, 9, 51-53; column 3, lines 53-55).

Also, regions of vacuum B, C are induced (see figure 2) and one or more vacuum outlets are located in proximity to the regions of vacuum B, C. An energy converter 28 is used for converting the force of air drawn into the regions of vacuum B, C into usable energy (see abstract).

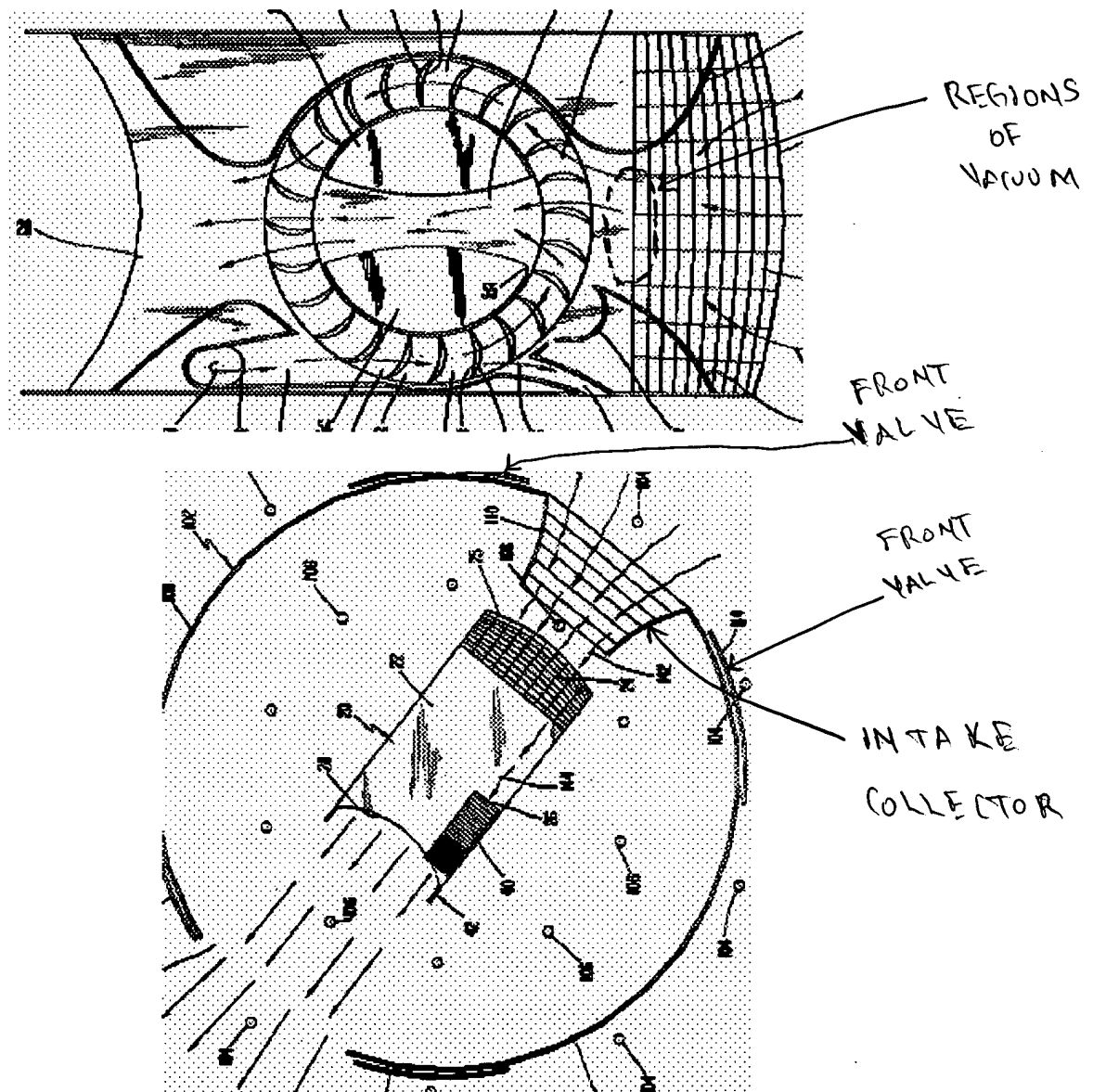
Moreover, a vacuum channel 16 is disclosed which supplies air to vacuum outlet and to regions of vacuum B, C (see figure 2). Also, Kaufman discloses inherently that some air is lead out (convey) of the converter 28 since half of the converter 28 is exposed outside the housing (see figure 1).

Kaufman further discloses that a framework 22, 55 supports and integrate all the elements into a single structure and the framework 22, 55 is able to place the wind acting on the framework to orient appropriately into the oncoming wind (column 3, lines 3-12).



VACUUM GENERATOR
(FUNNEL SHAPE SURFACES)

On the other hand, Lamont discloses for the purpose of increasing the mass flow rate of wind entering into a wind turbine, thus increasing output power, an intake collector 110, which supply a source of air to an energy converter 56 (see figures 2, 3, 9, 10, 14). Also, Lamont discloses using valves 120, 118, 116, 114, which control the flow of air into the regions of vacuum. (see figures 3, 8, 10; column 9, lines 1-13).



It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a wind energy conversion as disclosed by Kaufman and to modify the invention by having an intake device for the purpose of increasing the mass flow rate of wind entering into a wind turbine, thus increasing output power as disclosed by Lamont.

Allowable Subject Matter

8. Claims 3, 5, 6, 7, 8-12 and 13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

With regards to claims 3, 5, 6, 7 and 13, the prior art fails to disclose that the design has secondary airflow accelerators formed around the vacuum outlets and having aerodynamic surfaces such that the wind flowing around the surfaces of the secondary airflow accelerators will be accelerated to a lesser degree than the surfaces flowing around the vacuum generators.

With regards to claims 8-12, the prior art fails to disclose that the method of using a wind energy further reduces reverse flow of air into, rather than out of, a first vacuum outlet.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez

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whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julio C. Gonzalez
Examiner
Art Unit 2834

Jcg
February 7, 2005